DOCUMENT RESUME

ED 335 063 JC 900 017

AUTHOR Palola, E.
TITLE Learning Resource Networks in Postsecondary Education: An Impossible Dream?
PUB DATE Dec 89
NOTE 8p.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Community Colleges; Computer Literacy; *Computer Uses in Education; *Educational Resources; *Electronic Mail; Independent Study; *Online Searching; Postsecondary Education; *Teacher Role; Two Year Colleges

ABSTRACT

A new level of learning resources is surfacing in many postsecondary institutions, taking one of three principal forms: an independent study model of one-on-one learning, computer communications via e-mail between teachers and learners, or online database searching to facilitate access to information and the use of libraries. The use of these resources presents new challenges for the colleges and their faculty and students. Institutional funding priorities may have to be reassessed so that access to these resources can be fully supported in college budgets. In addition, professors and students may have to rethink their roles in the learning process. Most will need to receive training to utilize the resources effectively in the enhancement of learning. Once the technology has been learned and both students and teachers have the requisite hardware and software, e-mail allows the opportunity for spontaneous, unscheduled, timely communication between professors and students. This removes the difficulties involved in picking appointment times and locations convenient to all parties involved. Online database searching helps professors obtain citations to books and articles on a particular subject, develop bibliographies, direct students to applicable materials, and gain access to information for themselves. Yet, database searching, along with other computer-based learning resources, will not become central or important resources without the direct involvement of the professoriate. Educators should explore questions of student access to computers, help students overcome computer anxiety, encourage student use of computers to communicate with and receive information from faculty, and work directly with students in the development of strategies for computer searching. Technology can help faculty focus time and energy on the intellectual growth and development of students. (JMC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED335063

LEARNING RESOURCE NETWORKS IN POSTSECONDARY EDUCATION

AN IMPOSSIBLE DREAM?

ABSTRACT

Two major themes permeate postsecondary education today: unprecedented growth of computer-accessible information, and marked increases in costs (tuition and fees). Professors have vested interests in both themes since they bear directly on student learning.

RC 900 017

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E. Palola

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

12.89

INTRODUCTION - University professors seek new information, new sources of information and new ways of presenting information to students -- a central and crucial part of our roles as university professors. Traditionally we convey information to students in such ways as: lectures, group discussions, individual meetings, textbooks, and supplemental readings in journals and magazines. We might call these our primary learning resources since they are most frequently used and have been used in pse institutions for many decades. In addition, we use laboratories, field trips, internships and study abroad to provide students with direct application experiences. We might refer to these as secondary learning resources since they are not used as extensively nor as broadly across the disciplines.

TERTIARY LEARNING RESOURCES - What might be called a tertiary level of learning resources is surfacing in many pse (postsecondary education) institutions. We will be dealing with different perspectives and dimensions of this newer learning resource in this paper. This resource takes one of three principle forms: one-on-one learning, computer communications between learners, or online database searching. Several pse programs employ an independent study model where work between students and professors occurs in one-to-one, face-to-face discussions. Little, if any use is made of traditional classroom instruction. By computer communications we mean e-mail (electronic mail), an asynchronous form of communication. Its virtue is that messages can be transmitted between individuals at any time from any computer connected to a telephone. Thus, students and professors may supplement or substitute face-to-face or classroom discussions with individual or group communications via computer. And third, computer searching of information banks or databases supplements or replaces direct library use. An amazing array of reference materials and information can be accessed today via computers.

We use the term, learning resource network, to include primary, secondary and tertiary learning resources and the means by which we organize and provide access to these resources by professors and students. This paper focuses on tertiary learning resources, and specifically on e-mail and online searching such as Knowledge Index, EasyNet and BRS/After Dark.

Major challenges arises relative to an enhanced and extended use of tertiary learning resources. This is where the impossible dream begins! For one, professors and students may have to rethink their roles in the learning process. Second, professors and students may have to receive training

in one-on-one learning, e-mail, and online computer searching. And third, funding priorities in pse institution budgets may have to be reassessed so that the use of tertiary learning resources can be fully supported. When university budgets and tuition costs grow at rates often exceeding average cost-of-living increases, we should pause to ask ourselves about the underlying causes of current tuition and student fee increases at universities, and critically assess how these increases affect student learning and the academic resources needed.

This introduction establishes the dilemma: many professors and students seek effective ways to enhance learning with newer tertiary learning resources, but currently escalating pse budgets and growing costs to students and parents reflect long-standing commitments to traditional primary and secondary learning resources. The following discussion develops the details of this dilemma.

* * * * *

I have been working with about 40 students - my average load at a given time - doing e-mail and computer searching, so this experience provides some data and actual hands-on experience to share. By "working" I mean three things: helping students design their degree program (usually a bachelor's degree), selecting resources for different components of their learning contracts, tutoring them in subjects I know, and hearing about personal disasters, a thousand and one reasons why they are behind in their work, and why they have to graduate tomorrow

E-MAIL:ENHANCED COMMUNICATION BETWEEN STUDENTS AND PROFESSORS
-Working one-to-one with students, I find that office meetings are good, but not always necessary, wise or sufficient. Normally I meet every couple of weeks for an hour with a student, and during this intensive meeting we concentrate on the student's work and any problems encountered. Typically, we discuss what the student has read, what assignments were completed, what reactions the student had to the material or assignments, my reactions to the student's work and ideas. To get the most out of these meetings, it is essential to pick appointments and locations convenient to both of us, and more importantly, at a point that "makes sense" in terms of the student's academic work.

What seems to be missing when we rely heavily on face-to-face meetings - since they do often become routinized, patterned, automatic - is opportunity for spontaneous, unscheduled, when needed, timely communication. E-mail has a major role right here. About half (20) of my current student load have their own microcomputer and modem connection via telephone. Thus

they can connect with our college's central communications network. Using e-mail a student can communicate with me (asynchronously) anytime he/she wishes. We can respond to each other's e-mail messages when we wish rather than when the phone rings. And we avoid telephone tag.

When ideas or information come to me for a given student, I drop him/her an e-mail note. And when the student has a problem with his/her work, assignments or whatever, he/she drops me a note. I respond to that note when convenient, maybe between appointments at the office, maybe at home in the evening, or wherever I can find a vacant phone jack! Having a laptop micro gives one much flexibility. The point is that the student and I communicate and exchange information in much more flexible ways and at more flexible times than office face-to-face meetings normally allows. As classroom meetings can be critically reviewed, so can face-to-face meetings (some of my students still refer to them as "classes"). Now let's take the use of computers one more step.

ONLINE DATABASE SEARCHING - Currently I have access at my university and home offices to different online database searching systems. I use this searching capability in numerous ways in my work with students. More on this in a moment. One of the searching systems I use is Knowledge Index, a part of DIALOGUE, based in California; another is EasyNet, based at Bryn Mawr College in Pennsylvania; and a third is BRS/After Dark based in Chicago. Each has its own particular set of databases and access procedures. Typically the databases include information about: agriculture, arts, biology, business, chemistry, computers, drugs, economics, education, engineering, environment, foods, government, history, legal, literature, mathematics, medicine, psychology, religion and sociology. Also databases are available to magazines, encyclopedias, books in print, newspapers, etc.

Content of these databases varies, but often they contain citations to published articles with abstracts or summaries. With students I use computer searching in the following ways: to obtain titles of books, texts, monographs in a particular subject; to extract factual information on a particular subject; to develop a bibliography on a particular subject; to search for articles relevant to a particular question or study project; to guide me or my students as to what books or articles or government publications to get when they go to the library; to order hard copies of articles I cannot get because the nearest university library does not carry the appropriate journal.

The biggest advantage to me in using computer searching is the rapidity with which I can access an unbelievable volume of information right from my home or office, and access the information in ways I think up. My less frequent trips to libraries are now used mainly to obtain xerox copies of articles from journals or magazines, or to copy selected parts of reference books I identified

as useful to me or my students through a computer search done before the trip to the library.

IMPLICATIONS FOR THE PROFESSORIATE - Using computers to enhance communication between professors and students and to improve their joint access to information has important implications for the role of professor as traditionally defined. I have emphasized one-to-one work with students, responding to their individual background and educational needs, doing joint learning (or research) with them, and breaking rank in our traditional reliance on lectures or discussion groups, textbooks, reading lists, and libraries as the primary learning resources for our students. I am suggesting that much more consideration be given to the use of the tertiary learning resources, especially ones that are computer based.

For students to use e-mail, they need micros. Many students do not have them, nor do they currently have access to them. We must ask ourselves: how essential is access to computers for student learning? We we answer, "Not very essential", then our need is met. But, if we answer, "Pretty darn essential", then we have to think creatively about how students gain access and how to use micros in learning. I am individually, face-to-face, asking, reminding and encouraging my students about the importance of communication between us and the importance of diverse information to their learning. I am also helping them deal with jitters about computers and the basics of telecommunications and computer searching. This kind of "informal, unofficial training" is crucial to student using computers regularly in their learning.

Once we both have the necessary hard- and software, I have to regularly encourage students to communicate with me, and I, in turn, to communicate with them. Habits of ignoring each other ("Out of sight, out of mind"), developed over so many years, are strong and difficult to break.

When students gain expertise, they send messages, ask questions, send assignments or papers, and carry on useful "conversations" that do benefit their academic work and learning. And I send comments to them on their papers in ways and at times that I sense are often more timely and more useful than relying solely or mainly on our "classroom" contacts.

Doing online database searching also has important implications for us, their professors. "Focusing and clarifying" are two skills many of us try to teach our students in class, through assignments, papers, exams and in face-to-face contacts. These skills are especially important as we see the amount of access to information growing

day-by-day. The "pile" of information, is, indeed, overwhelming! And someone needs to help students deal with the oftmentioned feelings of being overwhelmed.

As professors, we will need to spend even more time with our students helping them in their use of databases. To undertake a good search requires guidance from a professional - a professor - in his/her subject areas. Working directly with students constructing, even executing a search, is a wonderful opportunity to shape student thinking skills and habits. By the way, books have already been written about how to conduct searches, and we need to consider spending a little time familiarizing ourselves with these books and their suggestions. More importantly, we must be able to spend time with our students, hopefully one-at-a-time, guiding them as they construct a search strategy.

Database searching will simply not become a central or important resource to learning without the direct involvement of the professoriate.

CONCLUSION - In this brief paper, I have tried to suggest, based principally on my own learnings, what might be one desirable direction and development for pse and its effective use of educational - mainly computer - technology. E-mail and computer searching open many new avenues of communication and the exchange of information. These options, place in a context of individual and independent learning for students, raise interesting and important questions for the roles of student and professor: Who is in charge of student learning? To what extent and in what ways can some (all) students play active roles in their learning?

Is it impossible or a dream or an impossible dream to think that technology can help us focus more energy and time on our essential academic business - the intellectual growth and development of our students? Funny to think of that as an innovation, but maybe it is ...

REFERENCES

Armstrong, C.J. (editor), Manual of Online Search Strategies. Hall and Co., Boston, Mass., 1988.

Badgett, T., "Solving the Riddle of On-Line Searches," PERSONAL COMPUTING, December 1987, 157-163.

Gilreath, C., Computerized Literature Searching: Research Strategies and Databases, Westview Press, Boulder, CO., 1984.

Janke, R., "BSR/After Dark: The Birth of Online Self-Service," ONLINE, Sept., 1983, 12-29.

Lockwood, R., "What's New in On-Line Services," PERSONAL COMPUTING, June, 1987, 151-161.

Ojala, M., "Knowledge Index: A Review," ONLINE September, 1983, 31-34.

O'Leary, M. "EasyNet: Doing It All for the End-User," ONLINE, July, 1985, 106-113.

Palola, E., Planning for Self-Renewal. Center for Research and Development in Higher Education, University of California, Berkeley, 1970.

Van Tuyl, L., "Clocking In At Home: More People Exchanging Commutes and Crowded Offices for Work-At-Home Life Styles," CHRISTIAN SCIENCE MONITOR, November 8, 1988, 23.

ERIC CLEARINGHOUSE FOR
JUNIOR COLLEGES